UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,373	11/03/2003	Jaeho Kim,	279.311US2	5975

21186 7590 09/20/2004

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
HOANG, TU BA	

ART UNIT	PAPER NUMBER
3742	

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/700,373	KIM, JAEHO
	Examiner	Art Unit
	Tu Ba Hoang	3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 21-31 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 21-31 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 03 November 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 11/03/03.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 21, "means or interpreting sensed signals" recited at line 4 renders the claim indefinite because it can not be clearly understood. There is a missing text between "means" and "interpreting" and it is believed that the word "or" is misspelled. It should be "for" instead. The recitation of "sensed signals" at line 4 is also considered indefinite since it is unclear for where these sensed signals came from. Such "sensed signals" must be clearly defined. It also noted that the comma after "device" recited at line 1 should also be deleted.

In claim 23, there is insufficient antecedent basis for "the specificity" recited at line 1 in the claim or from the preceding claim 21. Such "specificity" must be clearly defined.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 21; 22-25; 26; 27 and 29; and 28 and 30 –31 (in the respective order) are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1; 3-6; 2; 7; and 8 of U.S. Patent No. 6,643,547. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons: the patent claimed "an *atrial sensing channel* for sensing atrial depolarizations" is obviously the same as the claimed "**means for sensing atrial** depolarizations" of the instant application, the patent claimed "a *ventricular sensing channel* for sensing ventricular depolarizations" is also obviously the same as the "**means for sensing ventricular** depolarizations" recited in the claim of the instant application, and furthermore the patent claimed "a *controller for interpreting*

sensed signals generated by the sensing channels and *detecting atrial or ventricular senses* when the sensed signals exceed respective atrial and ventricular sensing threshold values; wherein the controller is *configured to measure atrial and ventricular rates*; wherein the controller is *programmed to blank the atrial sensing channel* after detection of a ventricular sense for a specified blanking interval; and wherein the controller is *configured to shorten the specified blanking interval* when a ventricular rate above a specified limit rate is detected" is obviously the same as the recitation of "**means [f]or interpreting sensed signals** and **detecting atrial or ventricular senses** when the sensed signals exceed respective atrial and ventricular sensing threshold values; **means for measuring atrial and ventricular rates**; **means for blanking the atrial sensing means** for a blanking interval after detection of a ventricular sense; and **means for shortening the blanking interval** when a ventricular rate above a specified limit rate is detected". It is clearly that such detailed structural limitations of the sensing channels and the controller recited in the patent claim would obviously cover the broader "means plus function" such as "means for sensing", "means for interpreting and detecting", "means for measuring", "means for blanking", and "means for shortening" recited in the claim of the instant application and since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent and moreover, the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter as previously set forth above.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See also MPEP § 804.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not show or fairly suggest a device and method thereof for operating a cardiac rhythm management device, wherein the atrial sensing channel (or atrial sensing means) is blanking after detection of a ventricular sense for a specified blanking interval and then the blanking interval is shortened when the ventricular rate above a specified limit rate is detected. It is noted that the Patent to Mann et al (US 4,825,870) cited by the Applicant while discloses a pacemaker having crosstalk protection feature in which the depolarization of the atria or ventricles in response to an externally generated stimulation pulse, such as the A-pulse or V-pulse of the pacemaker, are represented as a negative going Pp-wave or Rp-wave (stimulation pulse applied to the right ventricle), and prior to the termination of the AV interval (atrial stimulation pulse) or AVI (which has three subintervals: a blanking period, a crosstalk detection window, and a sense interval) and during the blanking period, all sensing is disabled and the blanking is not directed solely to the atrial channel.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Nappholz et al (US 5,312,445) and Boute (US 5,534,016).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Ba Hoang whose telephone number is (703) 308-3303. The examiner can normally be reached on Mon-Fri from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tu Ba Hoang
Primary Examiner
Art Unit 3742

September 13, 2004